

PN - JP59083633 A 19840515  
 PD - 1984-05-15  
 PR - JP19820194161 19821104  
 OPD - 1982-11-04  
 TI - PREPARATION OF MULTIPLE MOLDED PRODUCT HAVING DECORATIVE PATTERN  
 IN - MASUI SHIYOUHEI; MITSUI KIYOSHI; OOISHI KANEMITSU; OOMURA YOSHIHIKO  
 PA - SUMITOMO CHEMICAL CO  
 EC - B29C45/14D ; B29C45/14Q3 ; B29C45/14Q4  
 IC - B29F1/10

## COMPOSITION

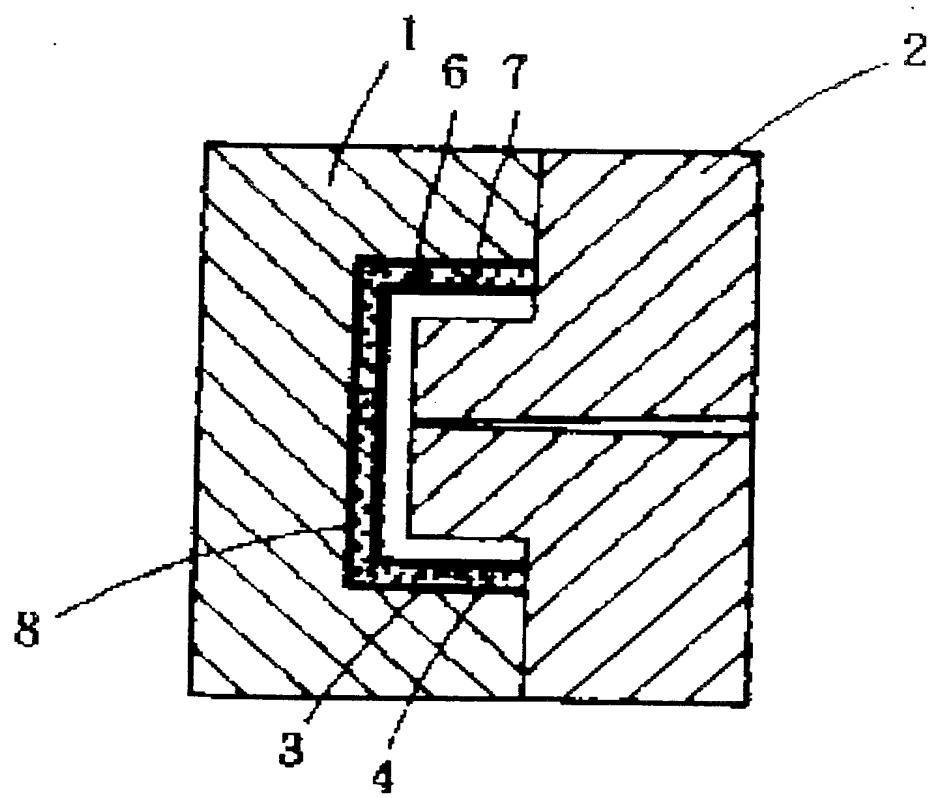
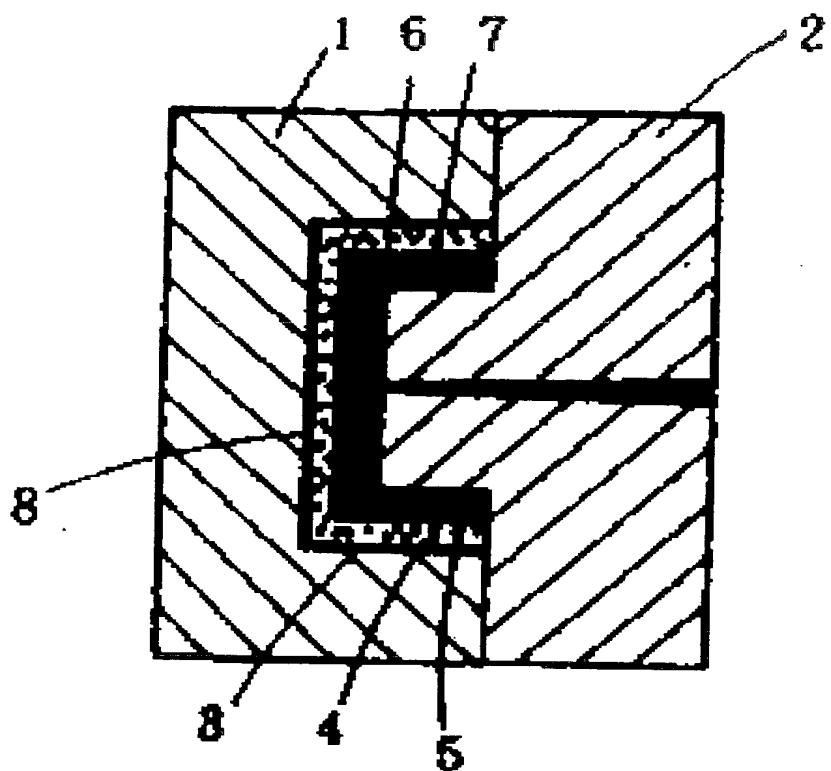
TI - Multilayered prod. mfr. having decorative pattern - by placing outer sheet and foamed sheet laminate in cavity block with patterned surface and injecting resin into cavity via male mould  
 PR - JP19820194161 19821104  
 PN - JP59083633 A 19840515 DW198425 003pp  
       - JP1021773B B 19890424 DW198920 000pp  
 PA - (SUMO ) SUMITOMO CHEM CO LTD  
 IC - B29C45/16 ;B29F1/10 ;B29L9/00  
 AB - J59083633 Method comprises arranging an outer sheet, overlapped with a foamed sheet, in a cavity block of which the concave has decorative patterns on its surface so as to touch the outer sheet with the concave; and injecting fused resin into a cavity produced between the foamed sheet and another male mould to form a resin core on the foamed sheet.  
       - Desired decorative patterns may be copied from the cavity block to the outer sheet without getting out of shape.  
       - In an embodiment, an outer flat sheet (3), consisting of EVA copolymer contg. 20% vinyl acetate, is adhered with an urethane foam layer (4), a polypropylene sheet (6) and an EVA copolymer film (7) by heat press. Thus laminated sheets are arranged in a cavity block (1) of which the concave has an uneven pattern (8). After the mould assembly (1,2) is closed, fused polypropylene is injected onto the film (7) through the mould (2).(3/3)  
 OPD - 1982-11-04  
 AN - 1984-156099 [25]

## COMPARISON

PN - JP59083633 A 19840515  
 PD - 1984-05-15  
 AP - JP19820194161 19821104  
 IN - MASUI SHIYOUHEI; others: 03  
 PA - SUMITOMO KAGAKU KOGYO KK  
 TI - PREPARATION OF MULTIPLE MOLDED PRODUCT HAVINGDECORATIVE PATTERN  
 AB - PURPOSE:To obtain a multiple molded product having a decorative pattern faithfully transferred to the surface thereof, by a method wherein a laminate sheet containing a surface skin layer and a foamed layer is placed in a mold having a decorative pattern formed to the inner surface thereof and molten resin is injected into the mold.

- CONSTITUTION: A laminate sheet consisting of a surface skin layer 3 and a foamed layer 4 or these layers and a backing layer 6 is placed in a mold consisting of a female mold 1 and a male mold 2 having a decorative pattern formed to the inner surface thereof so as to be contacted with said decorative pattern. Subsequently, molten resin is injected into the mold. An embossed pattern 8 to be transferred to the surface of a molded product is provided to the inner surface of the female mold 1 by engraving. As the kind of the pattern, for example, a leather crepe pattern, a satin pattern or a hairline pattern are used. The surface skin layer 3 is integrated with the foamed layer by a painting, an adhering or a contact bonding means and the surface opposed to the unevenness of the inner surface of the female mold is made flat. As the material of the surface skin layer, thermoplastic resin, a thermoplastic elastomer or rubber can be used.

- B29F1/10



トノリPVC袋うちシートの構成であり材料の種類は実施例で用いたものと同様である。この積層シートを実施例と同様の方法で金型内に載置、射出成形を行なった。得られた成形品の表面は凹凸が殆んど消失したものであった。

#### 4. 図面の簡単な説明

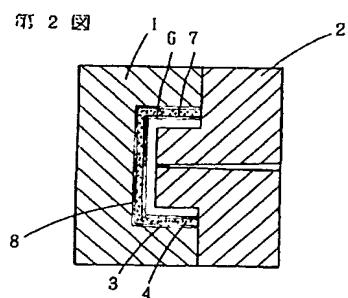
第1図は本発明に使用する積層シートの断面図である。第2～8図は、それぞれ金型内に積層シートの載置した状態および積層シートの背後に溶融樹脂を射出した状態を示す断面図である。

- 1 …… 雌金型
- 2 …… 雄金型
- 3 …… 表皮層
- 4 …… 泡泡シート
- 5 …… 芯材樹脂
- 6 …… 袋うち  
接着
- 7 …… 感熱性フィルム
- 8 …… 凹凸模様

第1図



第2図



第3図

